

In The Claims:

1. (Currently Amended) A method of simulating the operation of a spacecraft comprising the steps of:

requesting a connection to one of a plurality of simulated ground stations; generating a range server name corresponding to one of the plurality of simulated ground stations;

in response to the range server name, generating server location parameters; instantiating a range server dedicated to a single ground station; calculating simulated range data for each of the plurality of simulated ground stations; and,

providing the range data for one of the plurality of simulated ground stations in response to a unique port address.

2. (Original) A method as recited in claim 1 wherein the step of requesting comprises the step of requesting a connection to a simulated ground station from a spacecraft status and control client.

3. (Original) A method as recited in claim 1 wherein the step of having a common IP address for the plurality of simulated ground stations while providing a unique port address for each simulated ground station.

4. (Currently Amended) A method as recited in claim 1 wherein the step of requesting comprises requesting a connection to multiple ground stations, wherein each ground station has [[a]] the unique port address and common IP address.

5. (Original) A method as recited in claim 4 wherein the step of generating a range server comprises generating the range server name in response to the unique port address and using that name to instantiate a range server specific to a unique ground stations.

6. (Original) A method as recited in claim 1 further comprising the step of providing tracking information for the one of the plurality of simulated ground stations.

7. (Currently Amended) A method of simulating the operation of a spacecraft comprising the steps of:
generating range, attitude and elevation data for a plurality of simulated ground stations simultaneously;

identifying a desired simulated ground station from the plurality of ground stations
in response to a unique port address; and,

providing simulated range data for the desired simulated ground station to a real
time client in response to a unique port address.

8. (Currently Amended) A method as recited in claim 7 wherein the step of
identifying comprises the step of generating a simulated range server name and generating a
tracking server name.

9. (Original) A method as recited in claim 7 wherein the step of identifying
further comprises in response to the step of generating a range server name and tracking server
name, generating server location parameters.

10. (Original) A method as recited in claim 7 further comprising the step of
generating a connection to one of the plurality of simulated ground stations.

11. (Currently Amended) A method as recited in claim 7 wherein the step of
requesting comprises the step of requesting a connection to the multiple ground stations,
wherein each ground station has [[a]] the unique port address.

12. (Currently Amended) A method as recited in claim 8 wherein the step of
generating a simulated range server name comprises generating the range server name in
response to the unique port address and wherein the step of generating a tracking server name
comprises generating the tracking server name in response to the unique port address.

13. (Currently Amended) A spacecraft emulation system comprising:
a spacecraft status and control client;
an interface coupled to the spacecraft status and control client for generating
identification information for a desired simulated ground station;
a range data generator for generating simulated range data for a plurality of
simulated ground stations; and,

a range server coupled to the range data generator and spacecraft status and
control client having the simulated range data for said plurality of simulated ground stations
therein, said range server providing the simulated range data to said spacecraft status and
control client.

14. (Original) A spacecraft emulation system as recited in claim 13 further comprising a tracking server coupled elevation and attitude data generator and the spacecraft status and control client, the tracking server providing elevation and azimuth data to said spacecraft status and control client.

15. (Original) A spacecraft emulation system as recited in claim 13 wherein said interface, range data generator, range server, tracking data generator and tracking server are coupled within a single unit.